DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES Office of Structural Materials

Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 99.28

WELDING INSPECTION REPORT

Resident Engineer: Siegenthaler, Peter **Report No:** WIR-026355 Address: 333 Burma Road **Date Inspected:** 04-Apr-2011

City: Oakland, CA 94607

Project Name: SAS Superstructure OSM Arrival Time: 1500 **OSM Departure Time:** 300 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC) Changxing Island **Location:** Shanghai, China

CWI Name: CWI Present: Yes Lv Li Qing No **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A N/A **Electrode to specification:** Yes No Weld Procedures Followed: Yes No N/A N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A N/A Yes N/A **Approved Drawings:** Yes No **Approved WPS:** No Yes N/A **Delayed / Cancelled:** No

34-0006 **Bridge No: Component:** OBG

Summary of Items Observed:

On this date Caltrans OSM Quality Assurance (QA) Inspector, Vikram Singh was present during the times noted above for observations relative to the work being performed at ZPMC.

NDT

Bay 14

The following Non Destructive Testing (NDT) inspection carried out as per the ZPMC submitted Notification No 08735.

Ultrasonic Testing (UT)

This QA inspector performed Ultrasonic Testing (UT) of approximately 10% of an area that has been previously tested and accepted by ZPMC Quality Control (QC) personnel. This QA Inspector generated an UT report for this date. The member is identified as OBG. The weld designations reviewed is as follows:

TR3004-001-014, 015, 003, 005 TR3003TR1-001-014, 015, 003, 005

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OBG Bay 14

This QA Inspector randomly observed the following work in progress:

Flux Cored Arc Welding (FCAW)

This QA Inspector observed the welding operation per the FCAW process on a weld joint identified as SEG3013V-337 located on floor beam of the OBG Segment 13AW. The welder is identified as 201215. ZPMC Quality Control (QC) is identified as Mr. Wang Xiang Pin. The welding variables recorded by QC appeared to comply with WPS-B-T-2132-ESAB.

This QA Inspector observed the welding operation per the FCAW process on a weld joint identified as SEG3020F-017 located on deck panel diaphragm to floor beam flange of the OBG Segment 14W. The welder is identified as 066673. ZPMC Quality Control (QC) is identified as Mr. Wang Xiang Pin. The welding variables recorded by QC appeared to comply with WPS-B-T-2232-ESAB.

This QA Inspector observed the welding operation per the FCAW process on a weld joint identified as SEG3020G-002 located on deck panel diaphragm to floor beam flange of the OBG Segment 14W. The welder is identified as 067611. ZPMC Quality Control (QC) is identified as Mr. Wang Xiang Pin. The welding variables recorded by QC appeared to comply with WPS-B-T-2232-ESAB.

This QA Inspector observed the welding operation per the FCAW process on a weld joint identified as SEG3020H-011 located on deck panel diaphragm to floor beam flange of the OBG Segment 14W. The welder is identified as 067876. ZPMC Quality Control (QC) is identified as Mr. Wang Xiang Pin. The welding variables recorded by QC appeared to comply with WPS-B-T-2232-ESAB.

This QA Inspector observed the welding operation per the FCAW process on a weld joint identified as TR3027TR1-001-003 located on traveler rail. The welder is identified as 062708. ZPMC Quality Control (QC) is identified as Mr. Wang Xiang Pin. The welding variables recorded by QC appeared to comply with WPS-B-T-2132-ESAB.

This QA Inspector observed the welding operation per the FCAW process on a weld joint identified as TR3002TR1-001-010 located on traveler rail. The welder is identified as 066695. ZPMC Quality Control (QC) is identified as Mr. Wang Xiang Pin. The welding variables recorded by QC appeared to comply with WPS-B-T-2232-ESAB.

Shielded Metal Arc Welding (SMAW)

This QA Inspector observed the welding operation per the SMAW process on a weld joint identified as DP3126A-001-130 located on deck panel I-rib of the OBG Segment 13BW. The welder is identified as 067588. ZPMC Quality Control (QC) is identified as Mr. Wang Xiang Pin. The welding variables recorded by QC appeared to comply with WPS-B-T-3213-B-U3b.

This QA Inspector observed the welding operation per the SMAW process on a weld joint identified as

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DP3127A-001-023 located on deck panel I-rib of the OBG Segment 13BW. The welder is identified as 066179. ZPMC Quality Control (QC) is identified as Mr. Wang Xiang Pin. The welding variables recorded by QC appeared to comply with WPS-B-T-3213-B-U3b.

This QA Inspector observed the welding operation per the SMAW process on a weld joint identified as SEG3020BB-074 located on anchor plate to SA of the OBG Segment 14W. The welder is identified as 066261. ZPMC Quality Control (QC) is identified as Mr. Wang Xiang Pin. The welding variables recorded by QC appeared to comply with WPS-B-P-2214-Tc-U4b-FCM-1.

This QA Inspector observed the welding operation per the SMAW process on a weld joint identified as SEG3020G-059 located on longitudinal diaphragm stiffener of the OBG Segment 14W. The welder is identified as 066398. ZPMC Quality Control (QC) is identified as Mr. Wang Xiang Pin. The welding variables recorded by QC appeared to comply with WPS-B-P-2212-Tc-U4b-FCM-1.

This QA Inspector observed the welding operation per the SMAW process on a weld joint identified as SEG3020G-061 located on longitudinal diaphragm stiffener of the OBG Segment 14W. The welder is identified as 067829. ZPMC Quality Control (QC) is identified as Mr. Wang Xiang Pin. The welding variables recorded by QC appeared to comply with WPS-B-P-2212-Tc-U4b-FCM-1.

This QA Inspector observed the welding operation per the SMAW process on a weld joint identified as SEG3014M-001 located on side plate to corner assembly of the OBG Segment 13BW. The welder is identified as 067904. ZPMC Quality Control (QC) is identified as Mr. Wang Xiang Pin. The welding variables recorded by QC appeared to comply with WPS-345-SMAW-4G (4F)-FCM-Repair and B-CWR2914. For more details please see attached photo below:

Unless otherwise noted, all work observed on this date appeared to be in general compliance with the applicable contract documents.



Summary of Conversations:

No relevant conversations were reported on this date.

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Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang, 15000422372, who represents the Office of Structural Materials for your project.

Inspected By:	Singh, Vikram	Quality Assurance Inspector
Reviewed By:	Patterson,Rodney	QA Reviewer